

TWO NEW SPECIES OF GENUS *DYSTROPICUS* PASCOE
(COLEOPTERA: CURCULIONIDAE: CRYPTORHYNCHINAE)
FROM INDIA¹

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(With twelve text-figures)

Two new species *Dystropicus glabriscutellus* and *D. madhyapradeshi* have been described and illustrated. Descriptions of external genitalia of old species, namely, *D. dorsalis* and *D. clitella* are included. A key to the Indian species is also given.

INTRODUCTION

The genus *Dystropicus* Pascoe has so far been represented in India by only two species, namely, *Dystropicus dorsalis* Faust 1898 and *D. clitella* Faust 1898. Both species were recorded from the Eastern Himalayas and were described inadequately. During the present studies, an extensive survey of Northern India was made under PL-480 project on Curculionidae during 1975-81 and some unidentified collection from F.R.I., Dehra Dun (U.P.) was also borrowed. Consequently, as many as 70 species belonging to Cryptorhynchinae comprising 31 known species, 27 new species and 12 first records from India were studied. This paper describes two new species of the genus as well as the description of external genitalia of known species. Besides, the genus itself has also been recharacterised. A key to the Indian species is provided.

Genus *Dystropicus* Pascoe

Dystropicus Pascoe, *Ann. Mus. Civ. Genova*,
(2)11, 1885, p. 252, — Morimoto, *Esakia*
(11), 1978, p. 127.

Berosiris Lea (nec Pascoe), *Proc. Linn. Soc.*

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n. s. Wales XXXII, 1907, p. 415; *Trans. Roy. Soc. S. Austr.* XXXVII, 1913, p. 307.

Head with eyes distinctly granulate, sub-approximate beneath. Rostrum thin, distinctly separated from head, with scrobe oblique, not visible from above. Antennae relatively long, inserted at middle of rostrum, each with distinct club. Pronotum transverse, extending over head anteriorly, with prominent ocular lobes. Scutellum small and bare. Elytra broader than pronotum, longitudinally moderately convex. Legs short; femora thick and hardly clavate, dentate below; tibiae short, compressed, externally arcuate, armed; tarsi short, with claws free. Sternal canal surpassing hind end of mid-coxae, sometimes extending beyond middle of metasternum; metasternum longer than ventrite 3. Abdominal segment 2 longer than 1.

Type-species: *Dystropicus squalidus* Pascoe.

KEY TO THE SPECIES OF GENUS *Dystropicus* PASCOE

1. Rostrum as long as pronotum. Sternal canal reaching hind end of mid-coxae 2
Rostrum at least as long as head and pronotum together. Sternal canal extending far behind mid-coxae 3
2. Eyes strongly approximate. Elytra with shoulders oblique. Metasternum sloping inward
..... *dorsalis* Faust
Eyes hardly approximate. Elytra with shoulders roundly rectangular. Metasternum not sloping inward *glabriscutellus* sp. nov.
3. Eyes strongly approximate. Funicular segment 2 longer than 1. Elytra with longitudinal white

stripes near outer margins
 *madhyapradeshi* sp. nov.
 Eyes sub-approximate. Funicular segment I as
 long as 2. Elytra without stripes
 *clitella* Faust

***Dystropicus dorsalis* Faust**

(Figs. 1,2)

Faust, *Deutsche Ent. Zeitschr.*, 1898, p. 317.

Male genitalia with aedeagus parallel-sided, subtruncate posteriorly, uniformly and weakly sclerotized; aedeagal apodemes longer than aedeagus, slightly broader in apical half than basal part; phallotreme apical; phallobasic ring complete, somewhat broad; with apodeme tubular and short; parameres median. Gastral spiculum with median arm flattened at apical tip, more sclerotized at sides.

***Dystropicus clitella* Faust**

(Figs. 3-6)

Faust, *Deustache Ent. Zeitschr.*, 1898, p. 316.

Male genitalia with aedeagus parallel-sided, constricted behind middle, truncate posteriorly, uniformly sclerotized; aedeagal apodeme twice as long as aedeagus, strongly sclerotized except for apical tip; phallotreme subapical; phallobase as complete ring, weakly sclerotized, with rather short apodeme; parameres longer than phallobasic apodeme. Gastral spiculum with median arm rather long, strongly sclerotized. Female genitalia with coxites rather long, moderately sclerotized; styli strongly sclerotized, furnished with fine setae at apical tip; spiculum ventrale with lateral arms rather narrow, straight, approximate, as sclerotized as median. Spermatheca with cornu slightly curved, broadest at base, gradually narrowed behind, not pointed at tip; collum as well as ramus indistinct.

***Dystropicus glabriscutellus* sp. nov.**

(Figs. 7-9)

Fleed piceous, densely clothed with recumbent interspersed with a few suberect fulvous

scales; eyes silvery white, latero-ventral, ovate, subapproximate below. Rostrum piceous, as broad at base as frons, as long as pronotum, subcylindrical, widest at base gradually narrowed behind, acarinate, closely punctate from base to antennal insertion but finely and remotely so behind, squamose with pale scales in basal half and finely setose in apical half. Antennae ferruginous, inserted behind middle of rostrum; scape rather long, beset with pale setae in basal region but with black setae in clavate region; funicle densely pubescent, with joint 2 twice as long as 1, 3-6 longer than broad, 7 as long as broad; club fusiform, rather narrow, laterally compressed, with joint 1 longer than 2.

Pronotum piceous, longer than broad, parallel-sided in basal four-fifth and then abruptly narrowed towards apex, with prominent subapical constriction, bisinuate at base; dorsal surface beset with recumbent black scales forming median longitudinal wide stripe interspersed with a few erect scattered black scales and two tufts of black scales — one on either side of median line in middle surrounded by light-brown stripes of recumbent veined scales along with a few erect scales, whereas laterally furnished with darkbrown recumbent and a few erect scattered scales.

Scutellum black, shiny, slightly longer than broad, bare.

Elytra piceous, broader at base than pronotum, with roundly rectangular moderately developed shoulders, parallel-sided in basal third gradually tapering behind, without subapical calli, longitudinally convex, with base at a lower level; striae narrow, with punctures elongate or rounded; intervals densely clothed with overlapping recumbent scales along with a few erect scales forming tufts at intervals 2 and 3 in basal half, interval 1 elevated behind declivity; elytral vestiture light-dark variegated with pale and dark-brown patches unevenly scattered all over.

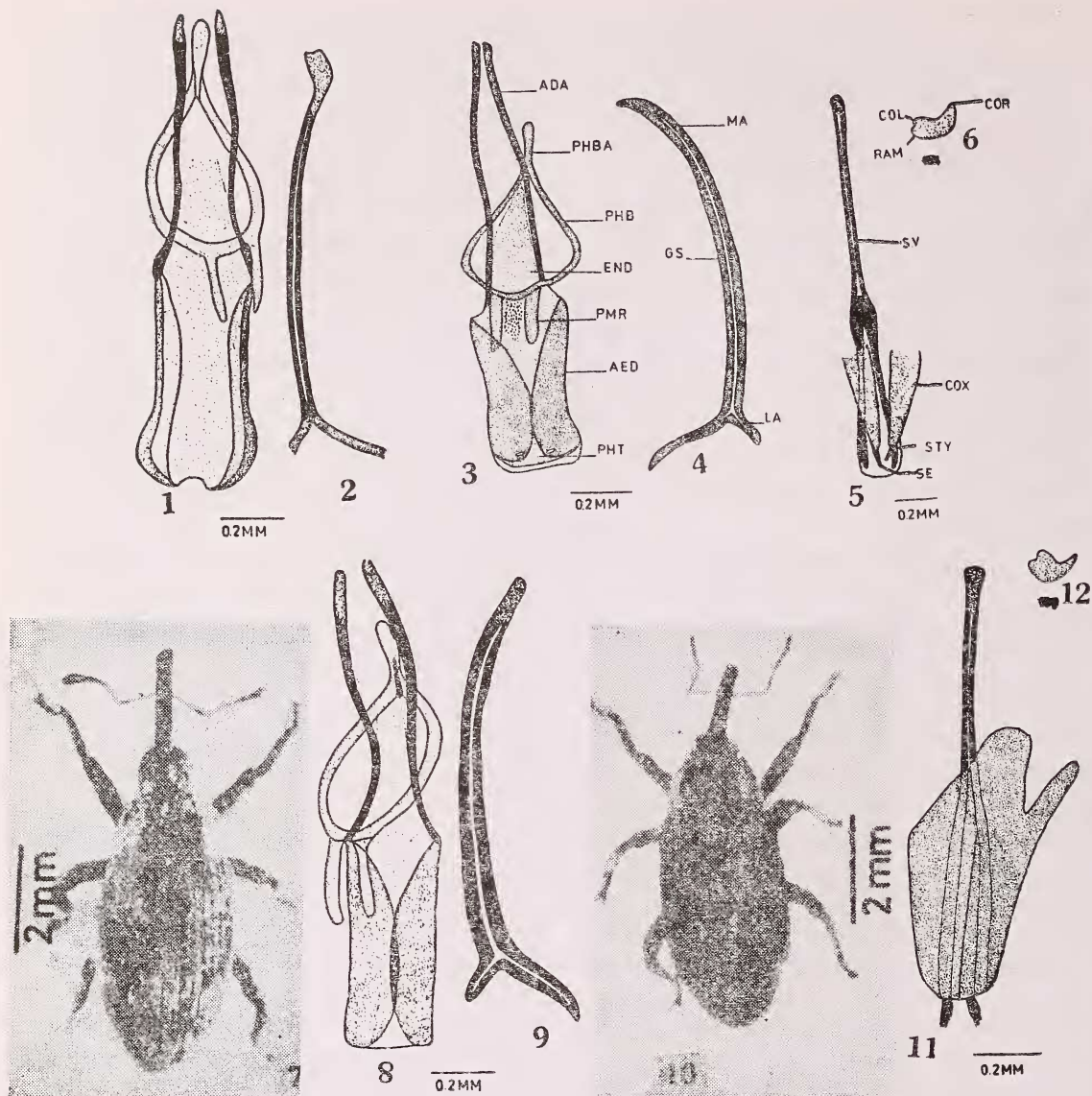


Fig. 1. Male genitalia of *Dystropicus dorsalis* Fst. (dorsal view); Fig. 2. Gastral spiculum of *D. dorsalis* Fst.; Fig. 3. Male genitalia of *D. clitella* Faust. (dorsal view); Fig. 4. Gastral spiculum of *D. clitella* Faust.; Fig. 5. Female genitalia of *D. clitella* Faust.; Fig. 6. Spermatheca of *D. clitella* Faust.; Fig. 7. Adult of *D. glabriscutellus* sp. nov.; Fig. 8. Male genitalia of *D. glabriscutellus* sp. nov. (dorsal view); Fig. 9. Gastral spiculum of *D. glabriscutellus* sp. nov.; Fig. 10. Adult of *D. madhyapradeshi* sp. nov.; Fig. 11. Female genitalia of *D. madhyapradeshi* sp. nov.

Abbreviations:

ADA: Aedeagal apodeme; AED: Aedeagus; COL: Collum; COR: Cornu; COX: Coxite; END: Endophallus; GS: Gastral spiculum; LA: Lateral arm; MA: Median arm; PHB: Phallobase; PHBA: Phallobasic apodeme; PHT: Phallotreme; PMR: Paramere; RAM: Ramus; SE: Setae; STY: Stylus; SV: Spiculum ventrale.

Legs with femora subclavate, densely clothed with recumbent fullygenous scales interspersed with a few erect scales; tibia rather small, widest at base rapidly tapering behind, laterally compressed; tarsal segment 1 as long as 2 and 3 combined.

Sternal canal surpassing hind end of mid-coxae. Metasternum depressed in middle but costate laterally, punctate with punctures provided with recumbent grey scales. Abdominal sternites punctate and densely clothed with recumbent grey scales.

Male genitalia with aedeagus parallel-sided, subtruncate at base, moderately sclerotized; aedeagal apodeme slightly longer than aedeagus, strongly sclerotized in basal half; endophallus without any sclerite; phallotreme apical, triangular; phallobasic ring much longer than broad, moderately sclerotized, with apodeme one-fourth as long as, but broader than aedeagal apodeme; parameres rather short, pointed at tip. Gastral spiculum with median arm straight, much broader than phallobasic apodeme, strongly sclerotized in middle; lateral arms unequal, moderately sclerotized.

Measurements: Body length: 5.60-7.00 mm.; Body width: 2.10-2.50 mm.; Rostrum length: 1.60-1.90 mm.; Rostrum width: 0.30-0.35 mm.

Material examined: Holotype: ♂; Tamil Nadu: Nilambur, Amarampallam; unknown host; C.F.C. Beason Coll.; 29.iv.1927. Paratype: 3 males; data same as that of holotype.

Remarks: This species has a general resemblance to *D. dorsalis* Faust and agrees with it in the length of the rostrum and extent of the sternal canal, in addition to other similarities. However, it can be easily separated

from *D. dorsalis* Faust from the ventrally less approximate eyes which are closely approximate in the latter. In addition, the length of the prothorax and the shape of the shoulders are also different in the two species, as described under their descriptions.

***Dystropicus madhyapradeshi* sp. nov.**

(Figs. 10-12)

Head coarsely punctate, densely clothed with recumbent light-brown flat scales; frons at a lower level than vertex; eyes silvery-white, shiny, oval, approximate below. Rostrum piceous in basal half, ferruginous in apical half, longer than head and pronotum combined, broader at base than frons, cylindrical, slightly arcuate, closely punctate in basal half but distantly and shallowly so in apical half, with punctures squamose at base whereas setose in remaining basal half, finely setose in apical half. Antennae ferruginous, inserted at middle of rostrum; funicle pubescent, with segment 2 longer than 1, thereafter diminishing in length, 3 and 4 longer than broad, 5 and 6 as long as broad, 7 transverse; club fusiform, distinctly segmented, subacuminate at tip.

Pronotum piceous, broader than long, widest and truncate at base, parallel-sided in basal half then narrowed behind, coarsely and reticulately punctate, densely clothed with black recumbent veined scales forming a broad median stripe from base to middle whereas with yellow scales in remaining region interspersed with a few erect scattered black scales.

Scutellum rounded, opaque at periphery but glabrous in middle, rather sparsely setose.

Elytra ferruginous, slightly broader at base than base of pronotum, with roundly rectangular shoulders, parallel-sided in basal third

thereafter roundly narrowed towards apex, without subapical calli; striae with punctures rounded, each studded with black granules at sides as well as accommodating a horizontal seta; intervals broader than striae, densely clothed with recumbent overlapping black and dark-grey scales along with a few erect scales forming tufts on intervals 2 and 4 in basal half.

Legs with femora sublinear, densely clothed with overlapping greyish-yellow scales; tibia short, curved at base, gradually narrowed towards apex, densely squamose; tarsal segment 1 as long as 2 and 3 combined.

Sternal canal surpassing hind end of mid-coxae. Metasternum behind sternal canal slightly depressed. Abdominal sternites closely punctate with punctures densely clothed with recumbent greyish-yellow scales concealing them completely.

Female genitalia with coxites fused all along their length, strongly sclerotized at sides; styli tubular, two and a half times as long as broad, furnished with a few setae at apex; spiculum ventrale with median arm rodshaped, slightly dilated at tip, more sclerotized in basal half; lateral arms rather approximate, as sclerotized

as basal half of median arm. Spermatheca small; cornu slightly curved, pointed at apex; collum and ramus indistinct.

Measurements: Body length: 4.06-4.76 mm.; Body width: 1.68-2.10 mm.; Rostrum length: 1.12-1.26 mm.; Rostrum width: 0.28-0.35 mm.

Material examined: Holotype: Female, Madhya Pradesh: S. Chand; on *Bombax malabaricum*; D.F.O. Coll.; 13.x.1938. Paratype: Female; data same as that of holotype.

Remarks: This species differs from the closely allied *D. clitella* Faust in having the eyes comparatively more approximate below and in the length of the second segment of funicle which is longer than the first as compared to the equal length of these two segments in *D. clitella*.

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